

REMARKS

The drawings stand objected to under 37 C.F.R. 1.83(a), for failing to show every feature of the invention specified in the claim. Specifically, the examiner asserts that a reinforcement layer extension inside the maximum width belt layer end and a reinforcement layer extension outside the maximum width belt layer end are not shown in the drawings. Applicant disagrees because the features are shown as part of reinforcement layers 9. However, in an effort to expedite prosecution, applicant has amended Figs. 1 and 2 to show extension portions 9a which extend to the inside of the belt layer, and extension portions 9b which extend to the outside of the belt layer. Support for these amendments can be found, for example, in paragraph [0027].

Additionally, applicant has amended paragraph [0032] of the specification to further describe the material shown in Figs. 1 and 2. Because all material added to paragraph [0032] is shown in Figs. 1 and 2, and/or described in, for example, paragraph [0027], no new matter has been added to the specification. Because the extension portions are clearly represented and numbered in the replacement drawings, applicant requests that the objection be withdrawn.

Claims 1, 2-4, and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Motokazu et al. (JP 2002-356103) and one or both of Kubota et al. (EP 1 241 023) and Serra et al. (WO 01/92039). Applicant traverses these rejections because the cited prior art fail to disclose or suggest reinforcement layers including a coat rubber having a $\tan \delta$ between 0.15 and 0.25.

Motokazu is directed to a pneumatic radial tire that includes a belt edge reinforcement layer. However, while Motokazu does disclose that a belt reinforcement layer is used, the reference is silent regarding the properties of the rubber used in the reinforcement layer, including the $\tan \delta$.

Kubota is directed to a light alloy wheel, including a rim having a bead seat for tire beads. While Kubota does disclose that a pneumatic tire can be mounted onto the alloy wheel, the reference is silent regarding the specific features of the tire. Accordingly, Motokazu and Kubota, whether taken alone or in combination, do not disclose or suggest reinforcement layers including a coat rubber having a $\tan \delta$ between 0.15 and 0.25, as recited in claim 1. Accordingly, applicant requests withdrawal of the rejection.

Serra discloses a different measurement of the $\tan \delta$ than that used in the present invention. Changes in measurement conditions for a dynamic property of rubber such as the $\tan \delta$ can significantly affect the characteristic being measured, making it impossible to compare characteristic values measured under different conditions.

The measurement conditions used in the present invention differ from those used in Serra in several key ways. For example, while the temperature used in the present invention was 60 C, Serra uses a variety of temperatures between 50 C and 70C. Additionally, the present invention measures $\tan \delta$ using an initial strain of 10% and an amplitude of $\pm 2\%$, while Serra discloses an initial strain of 20% with an amplitude of $\pm 7.5\%$. Finally, the present specification teaches that the $\tan \delta$ of the rubber should be measured at a frequency of 20 Hz, while Serra discloses measuring $\tan \delta$ at a frequency of 100 Hz.

Additionally, Serra does not contain a reference to the coat rubber of the reinforcing layer having a $\tan \delta$ within a range of 0.012 to 0.16.

The cited prior art, taken alone or combination, does not disclose or suggest the coat rubber having a $\tan \delta$ between 0.15 and 0.25, as now recited in claim 1. Moreover, the combination of references would not realize the advantage of the present invention, namely low road noise and a light wheel. Accordingly, applicant requests withdrawal of the rejections of claim 1, and its dependent claims.

Claims 1 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dobashi et al. (EP 0 554 108) in view of Kubota. Applicant traverses this rejection because Dobashi and Kubota, taken alone or in combination, fail to disclose or suggest a coating rubber having a $\tan \delta$ between 0.15 and 0.25, as recited in claim 1.

Dobashi discloses a pneumatic radial tire having an auxiliary layer arranged on each side region of a belt layer. However, Dobashi does not disclose the loss factor ($\tan \delta$) of the coating rubber used to coat the auxiliary layers. Thus, the reference does not disclose that the coating rubber has a $\tan \delta$ between 0.15 and 0.25, as recited in claim 1.

Additionally, as discussed above, Kubota is directed to a light alloy wheel, on which a pneumatic tire is mounted. However, Kubota is silent regarding specific properties of the pneumatic tire, including a $\tan \delta$. Accordingly, Dobashi and Kubota, alone or in combination, do not disclose or suggest a coating rubber having a $\tan \delta$ in the range of 0.15 to 0.25, as recited in claim 1. Thus, applicant respectfully requests withdrawal of the rejection of claims 1 and 6.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Dobashi and Kubota, and further in view of Motokazu. Claim 5 depends from claim 1, and therefore contains all the features of claim 1, plus additional features. Accordingly, applicant requests withdrawal of the rejection of claim 5 for the reasons identified above with respect to claim 1, and because Motokazu does not remedy the deficiencies identified above.

Claims 1, 2, 5, and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Baran (U.S. Patent No. 7,086,440) in view of Kubota. Applicant traverses this rejection because the cited prior art does not disclose or suggest reinforcement layers formed from a coat rubber having a $\tan \delta$ of between 0.15 and 0.25.

Baran discloses a pneumatic tire, including an annular reinforcing strip. However, Baran is silent regarding the properties of the coating rubber used in the reinforcing strip. That is, Baran fails to disclose the $\tan \delta$ of the coating rubber of the reinforcing strip.


Additionally, Kubota discloses a light alloy wheel, on which is mounted a pneumatic tire. However, Kubota fails to disclose the specific properties of the pneumatic tire, including a loss factor ($\tan \delta$) of the tire. Thus, Kubota does not disclose or suggest a coating rubber having a $\tan \delta$ of between 0.15 and 0.25, as recited in claim 1.

Accordingly, because Baran and Kubota, taken alone or in combination, do not disclose or suggest reinforcement layers formed of coat rubber having $\tan \delta$ of 0.15 to 0.25, applicant respectfully requests withdrawal of the rejection.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 
Kevin T. Bastuba
Registration No. 59,905

September 2, 2008

300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606
Telephone: 312.360.0080
Facsimile: 312.360.9315

Customer No. 24978

Fig. 1

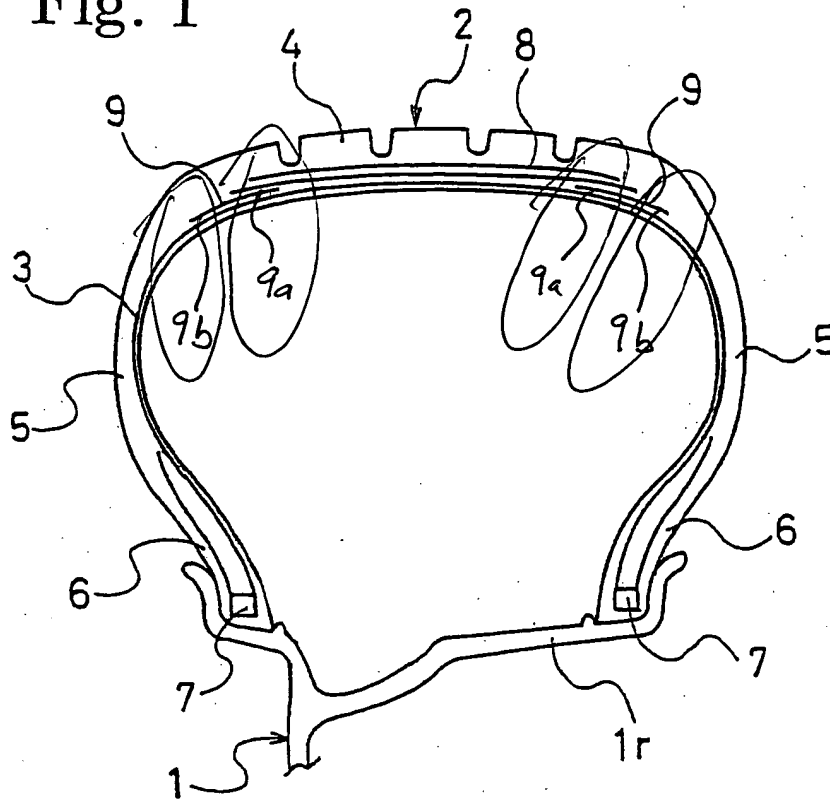


Fig. 2

